

Notice of Allowability

Application No.

10/702,313

Examiner

Satya B. Sastri

Applicant(s)

LINZER ET AL.

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on Oct. 25, 2006.
2. ☒ The allowed claim(s) is/are 3,5-8,10 and 16-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S COMMENT/AMENDMENT/REASONS FOR ALLOWANCE

1. All previous rejections have been overcome by the amendment filed on October 25, 2006 and the rejections are withdrawn. *Claims 3, 5-8, 10, 16-22* are now pending in the application.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Edward Meilman on Nov. 15, 2006.

The application has been amended as follows:

- In *claim 3*, line 7, insert after "weight" and before "of water", the phrase ", based on the total weight of the composition,".
- In *claim 10*, line 7, insert after "weight" and before "of water", the phrase ", based on the total weight of the composition,".
- In *claim 17*, line 7, insert after "weight" and before "of water", the phrase ", based on the total weight of the composition,".
- Cancel *claim 22*.

Reasons For Allowance

3. *Claims 3, 5-8, 10, 16-21* are allowed.

4. The following is an Examiner's Statement of Reasons for Allowance:

The instant claims are allowable over prior art to Rooney et al. (WO 99/19369), Lundy et al. (US 5,393,643) and Hagiwara et al. (GB 2,257,711 A).

The present claims are directed to an aqueous composition comprising the neutralization product of styrene/maleic anhydride copolymer, partially esterified with hydroxyalkyl acrylate or methacrylate, where the partially esterified ester is further esterified with an alcohol group, an ethylenically unsaturated amine or ammonia and 10-30% by wt., based on the total wt. of the composition, of water.

It is noted that US 6,559,222 to Rooney et al. is used as the equivalent of WO/991936. Prior art to Rooney et al. discloses an aqueous polymer dispersions or solutions comprising a polymer, which is energy curable. The polymers may be prepared, for example, by reacting styrene, maleic anhydride copolymer, a hydroxyl terminated acrylate and a monofunctional alcohol to form a partial ester. Subsequently, any remaining anhydride functionalities may be opened by water/ammonia mixture.

Lundy et al. disclose a waterborne photopolymerizable composition comprising a latex binder polymer having an acid functionality wherein the acid functionality is neutralized to at least 1 mole% with an aminoacrylate. At least 1% acid functionality may be neutralized with an aminoacrylate, preferably tertiary aminoacrylate.

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Prior art to Hagiwara et al. concerns aqueous photosensitive resin composition comprising a carboxyl-containing resin (b) an amine compound (c) a photo curable unsaturated compound and (d) photo polymerization initiator. Components (a) may be acid/anhydride copolymer, wherein the anhydride groups have been ring opened with an alcohol or a primary amine, which have a polymerizable unsaturated bond. Carboxyl group-containing resin may be post esterified in part with hydroxyl acrylates such as hydroxyethyl (meth)acrylate, hydroxypropyl (meth)acrylate etc. The composition may also include an amine compound, such as ammonia, triethyl amine, diethanolamine etc., amine compounds with polymerizable unsaturated bond, such as dimethylaminoethyl methacrylate, diethylaminoethylacrylamide and allylamine.

The prior art of record does not teach or suggest the limitation of more than 10% but less than 30% by weight, based on the total wt. of the composition, of water in the claim language. Therefore, the instantly claimed invention is deemed allowable over closest prior art of record as per said art neither anticipating nor rendering obvious, alone or in combination, the instantly claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

Future Correspondence

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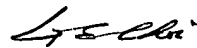
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri whose telephone number is 571-272-1112.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273 8300 for regular communications. The unofficial direct fax phone number to the Examiner's desk is 571-273-1112.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SATYA SASTRI

November 15, 2006


LING-SUI CHOI
PRIMARY EXAMINER